Warmup

- Pg 646 # 20, 28, 36
- Systems – solve by graphing
  - y = 2x – 3
  - y = -3x + 2

y = mx + b

y = mx + b

$-3x + 2 = 2x - 3$

$+6x \quad +3x$

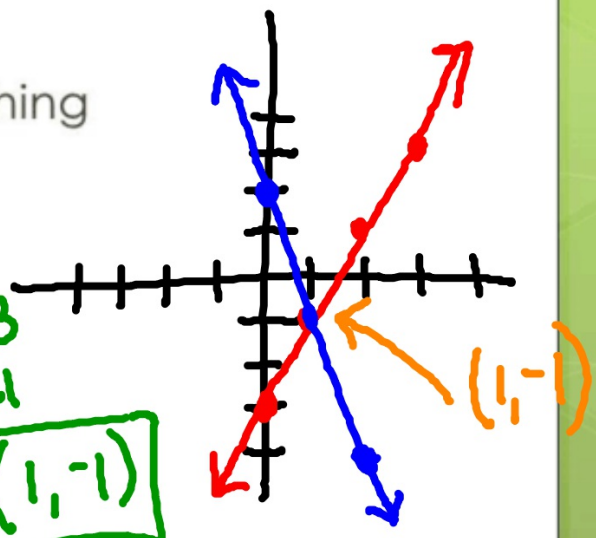
$2 = 5x - 3$

$5 = 5x \rightarrow x = 1$

$y = 2(1) - 3$

$y = -1$

$(1, -1)$



Percents

Section 11.2

Percents

- Used to describe a portion of a total

$$a = pb$$

- Where:
  - a is the new amount
  - p is the percent
  - b is the base amount (original)

Solving with Percents

- Replace is with and equal sign
- Replace of with a multiplication sign
- Solve for the variable

Examples

1. What is 30% of 50

$X = .30(50) \Rightarrow x = 15$

2. What is 15% of 45

$X = .15 \cdot 45 \Rightarrow x = 6.75$

3. What is 81% of 519

$X = .81 \cdot (519) \Rightarrow x = 420.39$

Examples

4. 14 is 25% of what number

$14 = .25 \cdot (x)$ $x = 56$

5. 71 is 31% of what number

$71 = .31x$ $x = 229.03$

6. 26 is 40% of what number

$26 = .4 \cdot x$ $x = 65$

Examples

7. 48 is what percent of 160

$48 = X \cdot 160 \qquad x = .30 \qquad 30\%$

8. 13 is what percent of 52

$13 = X \cdot 52 \qquad x = .25 \qquad 25\%$

9. 135 is what percent of 27

$135 = X \cdot 27 \qquad x = 5 \qquad 500\%$

Classwork

- Pg 652 # 1-9, 31-35 together
- Pg 653 # 10-30, 36-39

Homework:

- Pg655 # 63-71
- Quiz 11.1-11.2 tomorrow
- Finish classwork